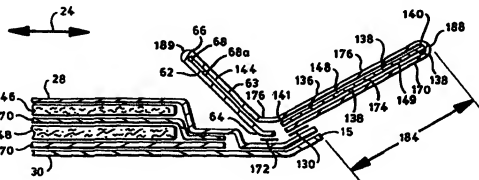




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: A61F 13/15	A1	(11) International Publication Number: WO 99/20215 (43) International Publication Date: 29 April 1999 (29.04.99)
(21) International Application Number: PCT/US98/21966 (22) International Filing Date: 16 October 1998 (16.10.98) (30) Priority Data: 08/954,400 20 October 1997 (20.10.97) US (71) Applicant: KIMBERLY-CLARK WORLDWIDE, INC. (US/US); 401 North Lake Street, Neenah, WI 54956 (US). (72) Inventors: ST. LOUIS, Raymond, Gerard; E7670 Puuri, Fremont, WI 54940 (US). VANEPEREN, David, James; 4055 North McCarthy Road, Appleton, WI 54915 (US). BEITZ, Mark, John; 1102 West Lorain Street, Appleton, WI 54914 (US). FAULKES, Michael, John; 2320 Fiesta Court, Neenah, WI 54956 (US). SCHLEINZ, Alan, Francis; 1312 West Cedar Street, Appleton, WI 54914 (US). SCHLINZ, Daniel, Robert; N1611 Prairie View Drive, Greenville, WI 54942 (US). (74) Agents: YEE, Paul, Y. et al.; Kimberly-Clark Worldwide, Inc., 401 North Lake Street, Neenah, WI 54956 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>

(54) Title: ABSORBENT ARTICLE WITH ENHANCED ELASTIC DESIGN FOR IMPROVED AESTHETICS AND CONTAINMENT



(57) Abstract

An absorbent article (10) which includes a backsheet layer (30) having a pair of laterally opposed and longitudinally extending side margins (20). Each side margin has an outwardly concave, terminal side edge contour (15) located at appointed leg opening regions (17) in an intermediate portion (16) of the side margin. Each concave side edge contour (15) has a selected longitudinal extent along a length dimension (26) of the article (10). A liquid permeable topsheet layer (28) is connected in a superposed facing relation to the backsheet layer (30), and an absorbent body (32) is sandwiched between the topsheet layer (28) and the backsheet layer (30). A separately provided gusset-flap composite member (19) is connected to at least one of the backsheet and topsheet layers along each of the leg opening regions (17). The gusset-flap member (19) provides a leg gusset section (142) and a containment flap section (144). The gusset-flap member (19) includes a barrier layer (174) having a pair of laterally opposed, longitudinally extending, barrier layer side edges (140, 141), and has a first major facing surface (148) and a second major facing surface (149). A nonwoven fabric layer (176) is joined in facing relation with the first facing surface (148) of the barrier layer (174). The fabric layer (176) has a leg gusset region (136), an outboard side portion (170), a containment flap region (63), and an inboard side portion (62). The outboard side portion (170) of the gusset-flap fabric layer (176) is arranged to wrap around at least one side edge of the barrier layer (174) and to extend inboard therefrom along the second facing surface (149) of the barrier layer (174). A first arrangement of a first plurality of separate, longitudinally extending elastomeric members (138) are attached and interposed between the barrier layer (174) and the fabric layer (176) within the leg gusset section (142) of the gusset-flap member (19).